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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,404	07/26/2001	Franz Josef Bayer	225/50217	4246

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CROWELL & MORING, L.L.P.
P.O. BOX 14300
Washington, DC 20044-4300

EXAMINER

BURNHAM, SARAH C

ART UNIT

PAPER NUMBER

3636

DATE MAILED: 03/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/912,404

Applicant(s)

BAYER ET AL.

Examiner

Sarah C. Burnham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 23 December 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The listing of references in the specification is not a proper information disclosure statement (i.e. German Patent Publication DE 297 10 511 U1). 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-5, 8-9, 14 and 16-17 are rejected under 35 U.S.C. 102(b) as best understood with the above-cited indefiniteness as being unpatentable by Grossmann (4,890,885). Grossman reveals a vehicle passenger seat (1), a backrest (3) and a head restraint (5), consisting of a container (10) with an "air non-permeable cover (13)" (column 2, line 43). An elastically deformable "foam-material layer (8)" (column 2, line 32) also covers the container (10). The container (10) is filled with "air" (column 3, line 18) and filling bodies (14). The container (10) is connected to a duct (19), which in turn

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is connected to an evacuator assembly consisting of a valve device (21) and a vacuum pump (20). A pump for the central locking system of a motor vehicle can serve as the vacuum pump. The evacuator assembly is located within the backrest (3) of the vehicle passenger seat (1) as shown in Figure 2. The container (10) is divided with a series of dividers (17) into a plurality of chambers. These dividers include "a large number of air passage openings (18)" making the chambers at least partially gas conductive.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 15 and 18 are rejected under 35 U.S.C. 103(a) as best understood with the above-cited indefiniteness as being unpatentable over Grossmann (4,890,885) as applied to claims 1, 3-5, 8-9, 14 and 17 above and in further view of Cuevas (5,902,010). As presented above, Grossmann shows all claimed limitations except a pre-crash sensory mechanism. Cuevas teaches the use of a pre-crash sensory mechanism (72) that "senses vehicle conditions indicating the occurrence of a crash" (column 2, line 44). It would have been obvious to one of ordinary skill in the art at the time of the instant invention to incorporate the pre-crash sensory mechanism revealed by Cuevas with the head restraint of Grossman. Incorporation of such a mechanism would further reduce the chances of "injuries... during an impact (from in front, the rear

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or laterally)" (Grossman, column 1, line 33) by correctly positioning the head restraint prior to the impact of the seat occupant's head.

6. Claim 5 is further rejected under 35 U.S.C. 103(a) as best understood with the above-cited indefiniteness as being unpatentable over Grossmann (4,890,885) as applied to claim 1, 3-5, 8-9, 14 and 17 above and in further view of Parrish (5,556,169). As presented above, Grossman shows all claimed elements. Parrish further supports the rejection of claim 5 by teaching the use of chambers that are "fluid sealed" (column 9, line 18) from each other. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to modify Grossman's head restraint assembly with the fluid sealed compartments revealed by Parrish. Such a modification would allow for the "individual compartments [to be] selectively filled and evacuated at different air pressures or vacuums" (column 9, lines 18-20) and improve contouring.

7. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as best understood with the above-cited indefiniteness as being unpatentable over Grossmann (4,890,885) as applied to claims 1, 3-5, 8-9, 14 and 17 above and in further view of Thorne (3,629,882). As presented above, Grossman shows all claimed elements except filling bodies consisting of different, deformable and/or non-deformable materials. Thorne teaches an energy dissipating support device containing "solid round pellets which may be made of polystyrene" (column 1, line 29) and "solid bars of vinyl or nylon" (column 1, line 70). The pellets are "not compressible" (column 2, line 44). The bars or "plungers" can be

"depressed" (column 2, line 42). It would have been obvious to one of ordinary skill in the art at the time of the instant invention to modify the head restraint of Grossman with the pellets and bars of Thorne because the pellets and bars of Thorne provide improved material for "absorbing shock and preventing damage to fragile materials" (column 1, lines 9-10). Also, the energy-supporting device claimed by Thorne can be directly applied to "cushioning equipment such as formfitting air or spacecraft seats [and] protective elements for interior of ground vehicles." (column 1, lines b and c).

8. Claims 11-13 are rejected under 35 U.S.C. 103(a) as best understood with the above-cited indefiniteness as being unpatentable over Grossmann (4,890,885) as applied to claims 1, 3-5, 8-9, 14 and 17 above and in further view of Kunz et al. (5,806,110). As presented above, Grossman reveals all claimed elements except a vacuum reservoir, an overpressure container and a Venturi nozzle. Kunz teaches the use of a pressurized air source (3) which serves as a reservoir from which air is pumped into the seat. It also serves as an overpressure container for air bleeding out of the seat when it is occupied. Furthermore, Kunz teaches the use of a "venturi tube" between a hose and a valve.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to modify Grossman's head restraint with the pressurized air source of Kunz because an enclosed pressure balancing system allows for the smooth flow of air from one cavity in the system to another and therefore a smooth positioning of the seat occupant. Additionally, it would have been obvious to one of ordinary skill in the art at

the time of the instant invention to modify Grossman's head restraint with the Venturi tube of Kunz because a Venturi tube would help "speed the deflation" (column 1, line 63) of Grossman's headrest.

9. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) with the above cited indefiniteness as being unpatentable over Grossmann. As presented above, Grossman shows all claimed elements except, the actions of "connecting", "attaching" and "providing" which are taken to make the head restraint, and the action of "evacuating" which is taken to use the head restraint. It would have been obvious, if not inherent, due to the structural design of the head restraint assembly as presented in claims 1-18, to both make and use the assembly as claimed in claims 19 and 20. The method of making the head restraint is both simple and efficient while the method of using the head restraint is effective in minimizing head injury during a rear end collision.

Response to Arguments

10. Applicant's arguments filed as Amendment A on 23 December 2002 have been fully considered but they are not persuasive.

Applicant argues "Grossman does not disclose or suggest, among other features, an evacuator assembly for an abrupt evacuation of the gas in the event of crash." It is of the Examiner's opinion, however, that "abrupt" is a relative term. The extraction pump (20) could indeed abruptly evacuate the gas within headrest (5) in the event of a crash if the seat occupant (or sensing mechanism) were to activate switch (22) soon

after, or "abruptly after" a crash event. Secondly, Grossman suggests that the disclosed headrest (5) is beneficial in the event of an unexpected crash in column 1, lines 27-34 by stating "It is the object of the present invention to undertake such measures at a seat having a headrest integrated into the backrest that the area of the cervical vertebrae column-lordosis of the respective seat passenger is effectively supported during the driving operation and that, on the other, injuries of the cervical vertebrae column are at least reduced during an impact (from in front, the rear or laterally)."

In view of the response above, all rejections remain proper.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah C. Burnham whose telephone number is 703-305-7315. The examiner can normally be reached on M-Th 7:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 703-308-0827. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1020.

SCB
February 3, 2003


Peter M. Cuomo
Supervisory Patent Examiner
Technology Center 3600